

CLAIMS:

1. Method of connecting a first subnet and a second subnet of a communication network by means of a bridge terminal, wherein the first subnet operates on a first frequency channel and the second subnet operates on a second frequency channel, the method comprising the steps of: switching an operation of the 5 bridge terminal between an operation in the first subnet on the first frequency channel and an operation in the second subnet on the second frequency channel; wherein the bridge terminal is unavailable for the first subnet when it is operated in the second subnet; wherein the bridge terminal is unavailable for the second subnet when it is operated in the first subnet; signalling the unavailability of the bridge terminal by 10 means of a power saving signal of the communication network.
2. The method of claim 1, wherein the communication network is a packet transmission network in accordance with the IEEE 802.11 standard.
- 15 3. The method of claim 2, wherein the operation of the bridge terminal is switched periodically between the first and second subnets such that the bridge terminal is operated in each of the first and second subnets for a predetermined duration; and wherein jitters in the predetermined duration are compensated over a plurality of switching cycles by controlling the switching.
- 20 4. The method of claim 1, wherein a content of missed beacon signals is reported by the bridge terminal by means of a probe/probe signalling.
5. Bridge terminal for connecting a first subnet and a second subnet of a 25 communication network, wherein the first subnet operates on a first frequency channel

and the second subnet operates on a second frequency channel, wherein an operation of the bridge terminal is switched between an operation in the first subnet on the first frequency channel and an operation in the second subnet on the second frequency channel; wherein the bridge terminal is unavailable for the first subnet when it is 5 operated in the second subnet; wherein the bridge terminal is unavailable for the second subnet when it is operated in the first subnet; wherein the unavailability of the bridge terminal is signalled by means of a power saving signal of the communication network.

6. The bridge terminal of claim 5, wherein the communication network is a 10 packet transmission network in accordance with the IEEE 802.11 standard.

7. The bridge terminal of claim 5, wherein the operation of the bridge terminal is switched periodically between the first and second subnets such that the bridge terminal is operated in each of the first and second subnets for a predetermined 15 duration; and wherein jitters in the predetermined duration are compensated over a plurality of switching cycles by controlling the switching.

8. The bridge terminal of claim 5, wherein a content of missed beacon signals is reported by the bridge terminal by means of a probe/probe signalling.

20 9. Communication network with a first subnet and a second subnet and a bridge terminal for connecting the first and second subnets, wherein the first subnet operates on a first frequency channel and the second subnet operates on a second frequency channel; wherein an operation of the bridge terminal is switched between an 25 operation in the first subnet on the first frequency channel and an operation in the second subnet on the second frequency channel; wherein the bridge terminal is unavailable for the first subnet when it is operated in the second subnet; wherein the bridge terminal is unavailable for the second subnet when it is operated in the first subnet; wherein the unavailability of the bridge terminal is signalled by means of a 30 power saving signals of the communication network.

10. The communication network of claim 9, wherein the communication network is a packet transmission network in accordance with the IEEE 802.11 standard.

11. Computer program for operating a bridge terminal of a communication network for connecting a first subnet and a second subnet, wherein the first subnet operates on a first frequency channel and the second subnet operates on a second frequency channel, wherein, when the computer program is executed on the bridge terminal, the bridge terminal performs the following steps: switching an operation of the bridge terminal between an operation in the first subnet on the first frequency channel and an operation in the second subnet on the second frequency channel; wherein the bridge terminal is unavailable for the first subnet when it is operated in the second subnet; wherein the bridge terminal is unavailable for the second subnet when it is operated in the first subnet; signalling the unavailability of the bridge terminal by means of a power saving signals of the communication network.